

Claims

1. A height adjustable pedestal comprising:

a floor contacting base comprising at least first and second base sections;

a first height adjustable telescoping column disposed above the first base section and supported by the first base section; wherein the first height adjustable telescoping column is comprised of a lower section attached to the first base section and supported by the first base section, and an upper section that can move upwardly and downwardly in relationship to the lower section; wherein the first height adjustable telescoping column can be adjusted in height in relationship to the first base section;

at least a second height adjustable telescoping column disposed above the base and supported by the base; wherein the second height adjustable telescoping column is comprised of a lower section and an upper section, wherein the upper section can move upwardly and downwardly in relationship to the lower section; wherein the second height adjustable telescoping column can be adjusted in height in relationship to the base;

a first furniture support mechanism disposed above all of the height adjustable telescoping columns and comprising first, second and third furniture support assemblies;

wherein the first furniture support assembly comprises at least a first pivoting furniture support mechanism disposed above a first height adjustable telescoping column and below a furniture component; wherein the pivoting furniture support mechanism includes a pivot that provides for a pivotal engagement between the first height adjustable telescoping column and a first furniture component;

wherein the second furniture support assembly comprises at least a first pivoting furniture support mechanism disposed above at least a second height adjustable telescoping column and below a first furniture component; wherein the second pivoting furniture support mechanism includes a pivot that provides for a pivotal engagement between the at least second height adjustable telescoping column and a first furniture component;

wherein the third furniture support assembly includes at least a first sliding furniture support mechanism disposed above at least a first height adjustable telescoping column and below a first furniture component; wherein the furniture support sliding mechanism is

comprised of at least a first surface that moves laterally in relationship to at least a second surface; and wherein the first furniture support sliding mechanism provides for lateral displacement between at least a first height adjustable telescoping column and a first furniture component;

wherein any of the pivoting furniture support mechanisms of the first and second furniture support assemblies of any of the furniture support assemblies can be disposed in a stacked relationship with each other, wherein a first pivoting furniture support mechanism disposed in a vertical plane above or below at least a second pivoting furniture support mechanism will allow for multi-directional pivoting of a first furniture component in relationship to at least a first height adjustable column;

and wherein at least first and second sliding furniture support mechanisms can be disposed in a stacked, slidable relationship with each other, wherein a first sliding furniture support mechanism disposed in a vertical plane above or below at least a second sliding furniture support mechanism will allow for multi-directional sliding of a first furniture component in relationship to at least a first height adjustable column;

and wherein any of the first, second or third furniture support assemblies can be disposed in any combination of a stacked relationship with each other, wherein at least a first furniture support assembly is disposed in a vertical plane above or below at least a second furniture support assembly;

a first furniture component disposed above the first furniture support mechanism and pivotally supported by the first furniture support mechanism;

wherein at least a first height adjustable telescoping column can be moved upwardly and downwardly, independently of any other height adjustable telescoping columns; causing the first furniture component to tilt;

and wherein all of the height adjustable telescoping columns can be moved upwardly and downwardly simultaneously, wherein the first furniture component will be adjusted in height in relationship to the floor.

2. The height adjustable pedestal of claim 1, wherein at least a first height adjustable telescoping column is not connected to the base.

3. The height adjustable pedestal of claim 1, wherein the second height adjustable column is disposed above the second base section and supported by the second base section; wherein the second height adjustable telescoping column is comprised of a lower section connected to the second base section and supported by the second base section, and an upper section that can move upwardly and downwardly in relationship to the lower section; wherein the first height adjustable telescoping column can be adjusted in height in relationship the second base section.

4. The height adjustable pedestal of claim 1, wherein the lower section of at least a first height adjustable telescoping column includes a pivot mechanism and is pivotally connected to a second height adjustable column.

5. The height adjustable pedestal of claim 1, wherein at least a first pivoting furniture support mechanism is disposed above at least a first height adjustable telescoping column and pivots in relationship to a first height adjustable telescoping column.

6. The height adjustable pedestal of claim 1, wherein at least a first pivoting furniture support mechanism is disposed above at least a first height adjustable telescoping column and pivots in relationship to the first furniture component.

7. The height adjustable pedestal of claim 1, wherein at least a first pivoting furniture support mechanism is disposed above at least a first height adjustable telescoping column and pivots bi-directionally in relationship to at least a first height adjustable telescoping column.

8. The height adjustable pedestal of claim 1, wherein at least a first pivoting furniture support mechanism is disposed above at least a first height adjustable telescoping column and comprises a ball and socket; wherein the first pivoting furniture support mechanism pivots omni-directionally in relationship to at least a first height adjustable telescoping column.

9. The height adjustable pedestal of claim 9, wherein the ball rotates in relationship to the socket.

10. The height adjustable pedestal of claim 1, wherein at least a first pivoting furniture support mechanism disposed above at least a first height adjustable telescoping column is pivotally connected to at least a first height adjustable telescoping column.

11. The height adjustable pedestal of claim 1, wherein at least the first furniture support assembly disposed above the first height adjustable telescoping column is pivotally connected to the furniture component.

12. The height adjustable pedestal of claim 1, wherein the first furniture support mechanism disposed above at least a first height adjustable telescoping column is pivotally connected to at least a first furniture support assembly disposed above a first height adjustable column.

13. The height adjustable pedestal of claim 1, wherein the third furniture support assembly includes a frictional slide control means for controlling the ease of slide in at least a first sliding furniture support mechanism.

14. The height adjustable pedestal of claim 1, wherein at least a first sliding furniture support mechanism disposed above at least a first height adjustable telescoping column moves laterally in relationship to a first height adjustable telescoping column.

15. The height adjustable pedestal of claim 1, wherein at least a first sliding furniture support mechanism disposed above at least a first height adjustable telescoping column moves laterally in relationship to the first furniture component.

16. The height adjustable pedestal of claim 1, wherein at least a first furniture support assembly disposed above at least a first height adjustable telescoping column moves in a laterally bi-directional relationship to at least a first height adjustable telescoping column;

17. The height adjustable pedestal of claim 1, wherein at least a first furniture support assembly disposed above at least a first height adjustable telescoping column moves in a laterally omni-directional relationship to at least a first height adjustable telescoping column;

18. The height adjustable pedestal of claim 1, wherein at least a first furniture support assembly disposed above at least a first height adjustable telescoping column is disposed above and is slidably connected to at least a first height adjustable telescoping column.

19. The height adjustable pedestal of claim 1, wherein at least a first furniture support assembly disposed above at least a first height adjustable telescoping column is slidably connected to the first furniture component.

20. The height adjustable pedestal of claim 1, wherein at least the third furniture support assembly disposed above at least a first height adjustable telescoping column is connected to at least a second furniture support assembly disposed above a first height adjustable telescoping column.

21. The height adjustable pedestal of claim 1, wherein at least a first height adjustable telescoping column is adapted for a laterally movable attachment of the first furniture support mechanism.

22. The height adjustable pedestal of claim 1, wherein at least a first furniture support assembly is adapted for a laterally movable attachment to at least a second furniture support assembly.

23. The height adjustable pedestal of claim 1, wherein a stacked relationship of at least the first and the second furniture support assemblies when positioned in a ninety degree cross relationship to each other above a first height adjustable telescoping column will allow for omni-directional pivoting of the first furniture support mechanism in relationship to the first furniture component and at least a first height adjustable telescoping column.

24. The height adjustable pedestal of claim 1, wherein a stacked relationship of at least two of the third furniture support assemblies when positioned in a ninety degree cross relationship to each other above a first height adjustable telescoping column will allow for omni-directional sliding of the first furniture support mechanism in relationship to the first furniture component and at least a first height adjustable telescoping column.

25. The height adjustable pedestal of claim 24, wherein the stacked relationship of at least one of the first and one of the second furniture support assemblies when additionally stacked with the stacked relationship of the at least two third furniture support assemblies will allow for omni-directional pivoting and omni-directional sliding of the first furniture support mechanism in relationship to the first furniture component and at least a first height adjustable telescoping column.

26. The height adjustable pedestal of claim 1, wherein the first furniture component is adapted for a laterally movable attachment of the first furniture support mechanism.

27. The height adjustable pedestal of claim 1, wherein the first furniture support mechanism includes at least a first spindle comprised of first and second ends; wherein the first end is connected to a first furniture support assembly and the second end is connected to a second furniture support assembly; wherein at least the first end is rotatably connected.

28. The height adjustable pedestal of claim 1, wherein the first furniture support mechanism includes at least a first spindle comprised of first and second ends; wherein the first end is connected to the first furniture support mechanism, and the second end is connected to a first height adjustable column; wherein at least the first end is rotatably connected.

29. The height adjustable pedestal of claim 1, wherein the first furniture support mechanism includes at least a first spindle comprised of first and second ends; wherein the first end is connected to the first furniture support mechanism, and the second end is connected to the first furniture component; wherein at least the first end is rotatably connected.

30. The height adjustable pedestal of claim 1, wherein at least the first height adjustable telescoping column is comprised of an upper section that rotates in relationship to the lower section.

31. The height adjustable pedestal of claim 1, wherein the first and at least second base sections are connected.

32. The height adjustable pedestal of claim 1, including at least a third height adjustable telescoping column disposed above the base and supported by the base; wherein the third height adjustable telescoping column is comprised of a lower section and an upper section, wherein the upper section can move upwardly and downwardly in relationship to the lower section; wherein the third height adjustable telescoping column can be adjusted in height in relationship to the base.

33. The height adjustable pedestal of claim 32, including a third base section, wherein the third height adjustable telescoping column is disposed above the third base section; wherein the third height adjustable telescoping column is comprised of a lower section connected to the third base section, and an upper section that moves upwardly and downwardly in relationship to the lower section; wherein the third height adjustable telescoping column can be adjusted in height in relationship to the third base section.

34. The height adjustable pedestal of claim 33, wherein the third base section is connected to at least the first base section.

35. The height adjustable pedestal of claim 1, including at least a fourth height adjustable telescoping column disposed above the base and supported by the base; wherein the fourth height adjustable telescoping column is comprised of a lower section and an upper section, wherein the upper section can move upwardly and downwardly in relationship to the lower section; wherein the fourth height adjustable telescoping column can be adjusted in height in relationship to the base.

36. The height adjustable pedestal of claim 35, including a fourth base section, wherein the fourth height adjustable telescoping column is disposed above the fourth base section; wherein the fourth height adjustable telescoping column is comprised of a lower section connected to the fourth base section, and an upper section that moves upwardly and downwardly in relationship to the lower section; wherein the fourth height adjustable telescoping column can be adjusted in height in relationship to the third base section.

37. The height adjustable pedestal of claim 36, wherein the fourth base section is connected to at least the third base section.

38. The height adjustable pedestal of claim 1, wherein the floor contacting base comprises a swivel mechanism; wherein the swivel mechanism includes an upper plate, a lower plate, and a low friction bearing assembly separating the upper and lower plates.

39. The height adjustable pedestal of claim 38, wherein the swivel mechanism further includes a frictional swivel control means for selectively controlling the ease of swivel in the swivel mechanism.

40. The height adjustable pedestal of claim 1, wherein the lower sections of the first and second height adjustable telescoping columns are connected to each other.

41. The height adjustable pedestal of claim 32, wherein the lower section of the third height adjustable telescoping column is connected to at least the lower section of at least the first height adjustable telescoping column.

42. The height adjustable pedestal of claim 35, wherein the lower section of the fourth height adjustable telescoping column is connected to the lower section of at least the second height adjustable column.

43. The height adjustable pedestal of claim 1, wherein the first furniture component is a tabletop.

44. The height adjustable pedestal of claim 1, wherein the first furniture component is a chair seat.

45. The height adjustable pedestal of claim 1, including a back support comprising slidable engagement means for providing a slidable attachment to the first furniture support mechanism.

46. The height adjustable pedestal of claim 1, including a back support attached to the first furniture component.

47. The height adjustable pedestal of claim 1, including at least first and second height adjustable telescoping columns supporting a second furniture support mechanism that is connected for slidable and pivotal engagement between a second furniture component and at least first and second height adjustable columns, wherein the at least first and second height adjustable columns are pivotally and slideably connected to the first furniture support mechanism.

48. The height adjustable pedestal of claim 47, wherein the second furniture component is a tabletop.

49. The height adjustable pedestal of claim 1, wherein the height adjustable pedestal includes at least a first electro-mechanical drive mechanism for moving the upper sections upwardly and downwardly in relationship to the lower sections of at least a first height adjustable telescoping column.

50. The height adjustable pedestal of claim 1, wherein at least a first height adjustable column includes at least a first electro-mechanical drive mechanism for moving the upper sections upwardly and downwardly in relationship to the lower sections of at least a first height adjustable column.

51. The height adjustable pedestal of claim 1, wherein the height adjustable pedestal includes at least a first piezoelectric drive mechanism for moving the upper sections upwardly and downwardly in relationship to the lower sections of at least a first height adjustable column.

52. The height adjustable pedestal of claim 1, wherein at least a first height adjustable column includes at least a first piezoelectric drive mechanism for moving the upper sections upwardly and downwardly in relationship to the lower sections of at least a first height adjustable column.

53. The height adjustable pedestal of claim 1, wherein the height adjustable pedestal includes at least a first electromagnetic mechanism for moving the upper sections upwardly and downwardly in relationship to the lower sections of at least a first height adjustable column.

54. The height adjustable pedestal of claim 1, wherein at least a first the height adjustable column includes at least a first electromagnetic mechanism for moving the upper sections upwardly and downwardly in relationship to the lower sections of at least a first height adjustable column.

55. The height adjustable pedestal of claim 1, wherein the height adjustable pedestal includes at least a first hydraulic drive mechanism for moving the upper sections upwardly downwardly in relationship to the lower sections of at least a first height adjustable column.

56. The height adjustable pedestal of claim 1, wherein at least a first height adjustable column includes at least a first hydraulic drive mechanism for moving the upper sections upwardly and downwardly in relationship to the lower sections of at least a first height adjustable column.

57. The height adjustable pedestal of claim 1, wherein the height adjustable pedestal includes at least a first mechanical drive mechanism for moving the upper sections upwardly and downwardly in relationship to the lower sections of at least a first height adjustable telescoping column.

58. The height adjustable pedestal of claim 1, wherein at least a first height adjustable column includes at least a first mechanical drive mechanism for moving the upper sections upwardly and downwardly in relationship to the lower sections of at least a first height adjustable column.

59. The height adjustable pedestal of claim 1, wherein the height adjustable pedestal includes at least a first spring drive mechanism for moving the upper sections upwardly in relationship to the lower sections of at least a first height adjustable telescoping column.

60. The height adjustable pedestal of claim 1, wherein at least a first height adjustable column includes at least a first spring drive mechanism for moving the upper sections upwardly in relationship to the lower sections of at least a first height adjustable column.

61. The height adjustable pedestal of claim 1, wherein the height adjustable pedestal includes at least a first pneumatic drive mechanism for moving the upper sections upwardly in relationship to the lower sections of at least a first height adjustable column.

62. The height adjustable pedestal of claim 1, wherein at least a first height adjustable column includes at least a first pneumatic drive mechanism for moving the upper sections upwardly in relationship to the lower sections of at least a first height adjustable column.

63. The height adjustable pedestal of claim 1, wherein at least a first height adjustable telescoping column is disposed in a non-parallel relationship with any other height adjustable telescoping columns.